

ABSTRACT

A STUDY ON CLINICAL PROFILE OF ENDOSCOPIC PROVEN GASTROESOPHAGEAL REFLUX DISEASE (GERD)

INTRODUCTION

Gastroesophageal reflux disease (GERD) is a common disease of the gastrointestinal tract(1). GERD is defined as symptoms or mucosal damage as a result of abnormal reflux of gastric contents into the esophagus or beyond(2). Common gastrointestinal symptoms are heartburn, regurgitation and retrosternal chest pain. Extra-gastrointestinal symptoms are bronchial asthma, laryngitis, hoarseness of voice, chronic cough, sore throat and dental erosions. Diverse studies on various population and lifestyle background had been reported in previous literature, however the data were few from our part of the country. Henceforth, warranting more studies representing the facts from our province of the country. Furthermore, longstanding and untreated GERD leads to morbid complications such as esophageal ulcer, Barrett's esophagus and esophageal stricture. However, variable inference had been postulated regarding the association of clinical, lifestyle and endoscopic characteristics associated with complications of GERD necessitating further exploration on this background.

AIM OF THE STUDY: To analyze the symptom profile of GERD

PRIMARY OBJECTIVE: To evaluate the symptomatology of GERD

SECNDONDARY OBJECTIVE: To analyze the dietary and lifestyle factors associated with GERD, to assess the prevalence of complications of GERD, and to assess the association of clinical, lifestyle and endoscopic characteristics with complications of GERD.

MATERIALS AND METHODS

STUDY DESIGN : Cross sectional observational study

STUDY PERIOD : February 2016 to July 2017

STUDY PLACE : Department of Medicine, PSG Institute of Medical Sciences and Research, Peelamedu, Coimbatore

SOURCE OF DATA : The present study comprised of patients who Were diagnosed of Gastro-esophageal reflux disease (GERD) based on upper gastrointestinal endoscopy (UGI copy)

SAMPLE SIZE : Total of 100 patients with upper gastrointestinal endoscopy proven Gastro-esophageal reflux disease

RESULTS

Mean age of GERD patients was 56.09 ± 15.93 years (Range: 20 – 82 years). From our study we inferred that GERD is more prevalent in males than females with male to female ratio of 4:1. In addition we also postulated that GERD is more frequent in BMI < 25, more number of co-morbidities. Classical symptoms of GERD such as heartburn, regurgitation and retrosternal chest pain were not present in all the patients. Dysphagia and odynophagia were less frequent in GERD. GERD is more prevalent in non-vegetarians than vegetarians. No strong association of smoking, alcohol, spicy foods, fried foods, citrus fruits, heavy meals, tea/coffee, aerated drinks, sleep disturbance and effect on work in GERD. *Helicobacter pylori* was present in 37% of the patients, in contrary to previous studies which showed inverse relation of *H.pylori* and GERD. Grade A reflux esophagitis is most common followed by B > D > C. Prevalence of GERD complications was 24% in our population. Most common complication was erosive esophagitis followed by Barrett's esophagus and esophageal stricture. Furthermore, we divided 100 GERD patients into two groups (GERD with complications and without complications) and analyzed the various demographic, symptomatology, lifestyle and endoscopic parameters between them. Age of the patient showed significant association with the presence of complications ($p= 0.000$). Higher the age of the patient, higher the risk of complication. Cutoff of ≥ 58.5 years

(AUROC: 0.769) was derived from our study to depict the higher risk of complications in GERD patients with 83% sensitivity and 61% specificity. Daily episodes of heartburn, regurgitation and retrosternal chest pain implies higher risk of complications ($p=0.018$, 0.023 , 0.016 respectively). Presence of *Helicobacter pylori* in GERD patients signifies higher risk of complications ($p=0.000$).

CONCLUSION

- Classical symptoms of GERD was not present in all the patients (Heartburn was present in 74% of patients, Regurgitation in 75% & Retrosternal chest pain in 66% of patients)
- GERD is more common in non-vegetarians than vegetarians
- Order of prevalence of grades of reflux esophagitis: $A > B > D > C$
- Prevalence of GERD complications was 24% in our study with order of erosive esophagitis > Barrett's esophagus and Esophageal stricture
- Higher age of the patient infers higher risk of complications
(Cut off : ≥ 58.5)
- Daily episodes of heartburn, regurgitation and retrosternal chest pain implies higher risk of complications

Key words: GERD (Gastroesophageal reflux disease), Heart burn, Regurgitation, Barrett's esophagus.